

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2"

INOGRADSKAYA, G.M.

Schistose banded dunite-peridotite. Zap.Vses.min.ob-va
85 no.2:232-235 '56. (MLRA 9:9)

(Dunites) (Peridotites)

VINOGRADSKAYA, G. I.

USSR/Mining - Petrography

Card 1/1- : Pub. 22 - 37/48

Authors : Vinogradskaya, G. I.

Title : Dunite-pegmatite the ultra basic formation of Ural

Periodical : Dok. AN SSSR 97/5, 879-902, August 11, 1954

Abstract : Data on the metasomatic origin of dunite-pegmatite rocks which are the ultra-basic formations (deposits) of the Ural. The physico-chemical conditions leading to the formation of dunite-pegmatite are explained. Table showing the chemical composition of dunite-pegmatite is included. One USSR reference (1952).

Institution : ...

Presented by : Academician D. S. Korzhinskiy, May 28, 1954

1. VINOGRADSKAYA, G. M.
2. USSR (600)
4. Chrysolite
7. Genesis of certain olivine rocks, Dokl. AN SSSR, 27, No. 5, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2

VINOGRADSKAYA, G.M.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2"

VINOGRADSKAYA, G.M.

Dunite and pegmatite ultrabasic formations in the Urals. Dokl.
AN SSSR 97 no.5:899-902 Ag '54. (MLRA 7:10)

1. Predstavleno akademikom D.S.Korshinskim.
(Ural Mountain region--Pegmatites) (Pegmatites--Ural
Mountain region) (Ural Mountain region--Dunite) (Du-
nite--Ural Mountain region)

VINOGRADSKAYA, I.V., red.; MATVEYEVA, A.Ye., tekhn. red.

[Drawings in the manufacture of machinery]Chertezhi v ma-
shinostroenii. Izd. ofitsial'noe. Moskva, Standartgiz, 1962.
143 p. (MIRA 16:2)
(Machinery—Drawing)

VINOGRADSKAYA, M. A.

"Electron Microscopy of Leukocyte Extracts of Persons Suffering From Leukosis," by N. I. Radgornaya and M. A. Vinogradskaya, Laboratory of Etiology of Tumors (head, Prof A. D. Timofeyevskiy, Active Member, Academy of Medical Sciences USSR), Ukrainian Institute of Microbiology, Epidemiology, and Hygiene (director, S. N. Terekhov) and the Hematology Division of the Ukrainian Institute of Clinical Medicine (head, Prof D. N. Yanovskiy, director, Prof A. L. Mikhnev), Voprosi Onkologii, Vol 2, No 5, 56, pp 528-532

The purpose of this research was to obtain new proofs of the presence of viruslike formations in extracts from leukocytes of persons suffering from leukosis. The method used was electron microscopy, according to A. D. Timofeyevskiy.

A total of 40 patients were under observation: eight with acute and subacute forms of leukosis and 32 with the chronic form.

In the extracts from leukocytes of persons suffering from leukosis were detected single globular formations measuring 50 - 150 millimicrons in diameter, found in pairs, and rarely in groups. In some cases such formations were detected only after cultivating leukocytes in vitro.

The authors suppose that these formations may be of a virus nature.

Sept. 13 85

USSR/Tumors

U-4

Abstr Jour : Ref Zhur - Biol., No 6, 1958, No 27745

Author : Nadgodnaya, N.I., Vinogradskaya, M.A.

Inst : Not Given

Title : Electronic Microscopy of Leucocyte Extracts of Persons Suffering from Leukemia.

Orig Pub : Vopr. onkologii, 1956, 2, No 5, 528-532.

Abstract : Leucocyte extracts of blood of 40 patients with acute and subacute leukemias, chronic myeloid and lymphatic leukemias and 9-60-day old cultures of white blood cells of these patients grown on a medium containing embryonal human tissue in Carrel's flasks, were studied by means of electron microscopy. In the great majority of cases virus-like, spherical and, at times, somewhat oval elongated formations 50-150 m microns in diameter were found which were usually situated separately and, rarely, in pairs or groups. Their absence in single preparations is explained by technical difficulties. The authors believe these formations to be living and capable of multiplying in cultures. Their etiologic significance deserves further studies.

Card : 1/1

CHEPELEVA, M.A.; VINOGRADSKAYA-YEZERSKAYA, M.A. (Kiyev)

Therapeutic effect of preparation No.8 (embitol) in some systemic diseases of the hemopoietic organs. Vrach.delo no.8:815-819 Ag '59.
(MIRA 12:12)

1. Otdel klinicheskoy gematologii (zav. - prof. D.N. Yanovskiy)
Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy meditsiny imeni akademika N.D. Strazhesko.

(ETHYLAMINE)

(HEMOPOIETIC SYSTEM--DISEASES)

STRAZHESKO, N.D.; YANOVSKIY, D.N.; VINOGRADSKAYA, M.A.

[Punctates of lymph nodes; an atlas] Punkty limfaticheskikh
uslov; atlas. Kiev, Gos.med.izd-vo USSR, 1953. 33 p.

(MLRA 10:5)

(LYMPHATICS)

VINOGRADSKAYA, M.A.
NADGORNAYA, N.I. (Kiyev, Bul'var Shevchenko, d.3, kv.3); VINOGRADSKAYA, M.A.

Electron microscopy of leukocyte extracts in leukosis [with summary
in English]. Vop.onk. 2 no.5:528-532 '56. (MLHA 10:2)

1. Iz laboratorii etiologii opykholey (zav. - deystvitel'nyy chlen
AMN SSSR professor A.D.Timofeyevskiy) Ukrainskogo instituta mikro-
biologii epidemiologii i gigiyeny (dir. - S.N.Terekhov) i iz
gematologicheskogo otdela Ukrainskogo instituta klinicheskoy medi-
tsiny (zav. - prof. D.N.Yanovskiy, dir. - prof. A.L.Mikhnev)

(LEUKEMIA,

virus-like leukocyte extracts, electron microscopy)

(MICROSCOPY, ELECTRON,

of leukocyte virus-like extracts in leukemia (Rus))

ACCESSION NR: AT4033530

S/0000/63/000/000/0007/0017

AUTHOR: Furman, M.S. (Doctor of chemical sciences); Lipes, V.V.; Vinogradskaya, M. V.; Gol'tyayeva, N. A.

TITLE: Liquid phase oxidation of cyclohexane by atmospheric air at high temperatures

SOURCE: Poluprodukty*dlya sinteza poliamidov (Intermediates for polyamide synthesis). Moscow, Goskhimizdat, 1963, 7-17

TOPIC TAGS: cyclohexane, cyclohexanol, cyclohexanone, cyclohexane oxidation, liquid phase oxidation, cyclohexane air oxidation, high temperature cyclohexane oxidation, cyclohexane oxidation kinetics

ABSTRACT: The kinetics of the liquid phase air oxidation of cyclohexane were studied in the absence of catalysts at temperatures of 160, 170 and 180C and pressures of 20, 35 and 50 atm. It was established that high temperature oxidation is of practical interest when the reaction lasts less than one hour. The ratio of cyclohexanol to cyclohexanone, resulting from the oxidation of cyclohexane, increases the temperature rises. The specific activation energy of the reaction was 3.5 to 5.5 kcal/mol at pressures of 20 to 50 atm. Oxidation at the indicated temperatures occurs in the diffusion area, i.e.

Card

1/2

VINOGRADSKAIA, O.

RT-123 (On the gonadotropic cycle of Anopheles). O gonotroficheskoi tsikle Anopheles.
Meditsinskaiia Parazitologiya i Parazitarnye Bolezni, 3(6): 460-479, 1934.

VINOGRADSKAYA, O. N.

"Autumnal Physiological Condition of the Mosquito *Anopheles Maculipennis messeae* Fall in the Conditions of Moscow Oblast", *Med. Paraz. i Paraz. Bolez.*, Vol. 17, No. 2, pp 166-68, 1948.

POD"YAPOL'SKAYA, V.P.; VINOGRADSKAYA, O.N.; ZASUKHIN, D.N.; GUSEYNOV, G.A.
[reviewers]; GELLER, E.R.; KALASHNIKOVA, A.P. [authors].

"General Biology." E.R.Geller, A.P.Kalashnikova. Reviewed by V.P.
Pod"iapol'skaia, O.N.Vinogradskaja, D.N.Zasukhin, G.A.Guseinov. Med.
paras.i paraz.bol. no.5:474-476 S-0 '53. (MIRA 6:12)
(Biology) (Geller, E.R.) (Kalashnikova, A.P.)

VINOGRADSKAYA, O.N.

Role of the tracheal system in the evaporation of water from the *Anopheles maculipennis messeae* Fall. and the seasonal variability of the spiracular index in species of the subfamily Culicinae (Diptera, Culicidae). Ent.oboz. 33:157-160 '53. (MLRA 7:5)

1. Entomologicheskii sektor Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR, Moscow.
(Mosquitoes)

VINOGRADSKAYA, O. N.

Effect of the temperature of larval medium on the size of breathing tubes in winged Culicoidae. Dokl. AN SSSR 112 no.2:366-368 Ja '57.

(MLRA 10:4)

1. Institut malyarii, meditsinskoy parazitologii i gel'mintologii i Tsentral'nyy institut usovershenstvovaniya vrachey. Predstavleno akademikom K. I. Skryabinym.
(Mosquitoes)

VINOGRADSKAYA, O.N.

Effect of chlorophos and temperature on the respiratory rhythm of flies. Med. paraz. i paraz. bol. 33 no.5:527-532 S-9 '64.

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny i eni Martsinovskogo Ministerstva zdravookhraneniya SSSR i kafedra meditsinskoy parazitologii TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

VINOGRADSKAYA, O.N.

Work of medical entomologists of sanitation and epidemiological stations during the winter. Med.paraz. i paraz. bol. 26 no.4:
483-486 J1-Ag '57. (MIRA 10:11)

1. Iz sektora meditsinskoy entomologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (zav. sektorom - prof. V.N.Beklemishev, dir. instituta - prof. P.G.Sergiyev) i Tsentral'nogo instituta usovershenstvovaniya vrachey (dir. instituta - prof. V.P.Lebedev)

(INSECTS,

activities of med. entomologists during cold months (Rus))

Vinogradskaya, O.N.

USSR / Zooparasitology - Mites and Insects -
Disease Vectors

G-4

Abs Jour: Referat. Zh. Biol., No. 1, 1958, 886

Author : Vinogradskaya, O.N.

Title : Effect of the Water Temperature in Which Larvae
Develop on the Size of Respiratory Windpipes of
Winged Mosquitoes.

Orig Pub: Dokl. AN SSSR, 1957, 112, No. 2, 366, 368

Abstract: Breeding of *Anopheles maculipennis atroparvus*
larvae was conducted from stage III to wing
growth at different temperatures from a laboratory
culture; also larvae *A.m. messeae* and some other
Culicini taken from water reservoirs of the Mos-
cow district. In males and females of *A.m.*
messeae and *A.m. atroparvus*, *Aedes dorsalis* and
Theobaldia alaskaensis developed at 12-15°, the

Card 1/2

USSR / Zooparasitology - Mites and Insects -
Disease Vectors

G-4

Abs Jour: Referat. Zh. Biol., No. 1, 1958, 886

respiratory indices were larger than in those which were developed at 25°. The variation of index size from the average in different individuals was slight and no overlap of size index was observed at different temperatures. In males and females of *Culex pipiens* the differences were expressed somewhat less clearly, evidently because of the fact that for the experiment only larvae of state IV were used. Thus the external conditions of development in the aqueous stages (temperature) are significant in the process of formation of winged forms. The adaptive significance of these changes is discussed.

Card 2/2

VINOGRADSKAYA, O. N., Doc Biol Sci -- (diss) "Morphology and physiology of the respiratory apparatus and water balance of winged blood-sucking mosquitos in connection with conditions of habitat." Moscow, 1960. 20 pp; (Academy of Medical Sciences); 200 copies; price not given; list of author's works at end of text (15 entries); (KL, 17-60, 145)

BEKLEMISHEV, V.N., prof.; VINOGRADSKAYA, O.N.; DARSKAYA, N.F.; DERBENEVA-UKHOVA, V.P.; DETINOVA, T.S.; DOLMATOVA, A.V.; LANGE, A.B.; OLSUF'YEV, N.G.; POSPELOVA-SHTROM, M.V.; RODENDORF, B.B.; SHIPITSINA, N.K.; PLAVIL'SHCHIKOV, N.N., red.; LYUDKOVSKAYA, N.I., tekhn.red.

[Guide to arthropods harmful to human health] Opredeletel' chlenistonogikh, vrediashchikh zdorov'iu cheloveka. Moskva, Gos. izd-vo med.lit-ry, 1958. 419 p. (MIRA 12:5)

1. Deyatvitel'nyy chlen AMN SSSR (for Beklemishev). 2. Institut malyarii i meditsinskoy parazitologii Ministerstva zdravookhraneniya SSSR (for Beklemishev, Derbeneva-Ukhova, Detinova, Dolmatova, Pospelova-Shtrom, Shipitsina). 3. Kafedra parazitologii TSentral'nogo inst. usovershenstvovaniya vrachey (for Vinogradskaya). 4. Nauchno-issledovat.inst. Kavkaza i Zakavkaz'ya Ministerstva zdravookhraneniya SSSR v Stavropole (for Darskaya). 5. Kafedra entomologii Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova (for Lange). 6. Otdel parazitologii i meditsinskoy zoologii Inst. epidemiologii i mikrobiologii im. N.F.Gamalei AMN SSR (for Olsuf'yev). 7. Institut paleontologii Akademii nauk SSSR (for Rodendorf).
(ARTHROPODA) (INSECTS AS CARRIERS OF DISEASE) (PARASITES--MAN)

LAZAREV, L.P., doktor tekhn.nauk, prof., red.; ZOLOTOV, P.F., inzh.red.;
VINOGRADSKAYA, S.I., izdat.red.; ORESHKINA, V.I., tekhn.red.

[Manufacture of optical instruments; collected articles] Opticheskoe priborostroenie; sbornik statei. Moskva, Gos.nauchno-tekhn. izd-vo Oborongiz, 1961. 125 p. (Moscow. Moskovskoe vysshee tekhnicheskoe uchilishche. Trudy, no.103). (MIRA 14:12)
(Optical instruments)

Vint 2000-2001, 1-2
SVESHNIKOVA, Valentina Mikhaylovna; BREGETOVA, L.G., otvetstvennyy redaktor;
VINOGRADSKAYA, S.H., redaktor izdatel'stva; PROLOV, P.M., tekhnicheskii
redaktor.

[Osmotic pressure in Alpine plants] Osmoticheskoe davlenie u
vysokogornnykh rastenii. Stalinabad, Izd-vo Akademii nauk tadzhikskoi
SSR. 1956. 54 p. (Trudy, vol. 45) (MLRA 10:4)
(Pamirs--Alpine flora)
(Osmosis)

STESHENKO, Anastasiy Petrovna; SIDORENKO, G.T., otvetstvennyy redaktor;
VINOGRADSKAYA, S.N., redaktor izdatel'stva; FROLOV, P.M., tekhnicheskii redaktor

[Improving desert pastures in the Pamirs] Uluchshenie pustynnykh pastbishch na Pamire. Stalinabad, Izd-vo Akademii nauk Tadzhikskoi SSR, 1954. 21 p. (Nauchno-populiarnaya biblioteka, no.28) (MIRA 9:8)
(Pamirs--Pastures and meadows)

VINOGRADSKAYA, S.S.

Changes in the chemical composition of the roe of certain fishes
of the Black Sea in the progress of maturation. Zool.zhur.33 no.1:
139-148 Ja-F '54. (MLRA 7:2)

1. Karadagskaya biologicheskaya stantsiya Akademii nauk Ukrainskoy
SSSR. (Black Sea--Fishes) (Fishes--Black Sea)

SOV/119-58-10-9/19

AUTHORS: Berliner, M. A., Candidate of Technical Sciences,
Vinogradskaya, V. B., Engineer

TITLE: Automatic Conductimetric Instrument for Concentration
Measurements (Avtomaticheskij konduktometricheskij kontsentra-
tomer)

PERIODICAL: Priborostroyeniye, 1958, Nr 10, pp 22-24 (USSR)

ABSTRACT: The instrument mentioned above was devised at the
Laboratory for Automation of the Central Research Institute
of the Leather and Shoe Industry (TsNIKP).
Graphite of the type UG -4 from the Kudinovofactory is used
as electrode material. The turned cylindrical graphite bars
are pressed into cylindrical little plastic tubes according
to their use. Three different types are shown.
Thermosensitive resistors MMT-9, MMT-4 are used for the
automatic compensation of the temperature.
With the electrodes and thermosensitive resistors mentioned
the error of temperature measurement -- within one temperature
range of from ± 10 to $\pm 15^{\circ}$ amounted to less than 0,5 - 0,75%
of the maximum deflection of the concentration measuring

Card 1/2

SOV/119-58-10-9/19

Automatic Conductometric Instrument for Concentration Measurements

instrument.

The apparatus EMD -212 is used as amplifier. The scale is calibrated individually for each liquid.

A long test period with the various solutions $[(\text{NH}_4)_2\text{SO}_4$; H_2SO_4 , $\text{H}_2\text{SO}_4 + \text{NaCl}$] showed that the readings could always be reproduced. There are 3 figures.

Card 2/2

BERLINER, M.A.; VINOGRADSKAYA, V.B.

Automatic electronic concentration measuring instrument.
Priboroostroenie no.10:22-24 O '58. (MIRA 11:10)
(Electronic measurements)

37538
S/197/62/000/004/001/001
B104/B102

18.7.00
AUTHORS:

Vinogradskaya, Ye., Molchanova, G.

TITLE:

Regeneration of the initial structure of alloys

PERIODICAL:

Akademiya nauk Latviyskoy SSR. Izvestiya, no. 4, 1962,
27-31

TEXT: The occurrence, growth, and loss of the magnetic phase of an alloyed steel (0.12% C, 12.93% Mn, 0.18% Co, 1.61% Cu) during $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ phase transitions were investigated with a magnetometer. Samples 4 mm in diameter and 70 mm long were heated to 850°C, slowly cooled to -196°C in the bath of the magnetometer, and again heated up to 600°C and higher temperatures. At $t_{A_f} = 600^\circ\text{C}$, austenitic transformation was complete. During a second cooling to -196°C the samples did not undergo a $\gamma \rightarrow \alpha$ phase transition. Higher temperatures in this treatment ($> t_{A_f}$)

Card 1/2

Regeneration of the initial structure ... S/197/62/000/004/001/001
B104/B102

reduced the stability of the β -phase during the cooling process. When the samples were heated up to 850°C , they became completely unstable.

Another cooling to -196°C produced the same amount of β -phase as had been obtained in the first β -phase transition. The original structure of slightly deformed samples was completely restored by annealing them at $t_{\beta} + 250^{\circ}\text{C}$ for a given time, followed by slow cooling. There are 3 figures.

ASSOCIATION: Institut avtomatiki i mekhaniki AN Latv. SSR
(Institute of Automation and Mechanics AS LatSSR)

SUBMITTED: November 23, 1961

X

Card 2/2

VINOGRADSKAYA, Ye.; MOLCHANOVA, G.

Reconstitution of the initial structure of alloys. Vestis Latv
ak no.4:27-31 '62.

1. Institut avtomatiki i mekhaniki AN Latviyskoy SSR.

37840

S/123/62/000/008/016/016
ACO4/A101

18.7500

AUTHORS:

Vinogradskaya, Ye. A., Molchanova, G. A., Prosvirin, V. I.

TITLE:

The specific features of phase transformations in transition type steels

PERIODICAL:

Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1962, 2, abstract 8G12 (V sb. "Prevrashcheniya v splavakh i vzaimodeystviye faz". Riga, AN LatvSSR, 1961, 3-19)

TEXT:

The authors have plotted hysteresis loops of $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ transformations for a group of steels of the transition class, which are characterized by a variable nickel and aluminum content. These loops, showing the nature and kinetics of transformations, made it possible to establish the "critical" temperatures of martensite transitions. It was found that alloys of this category containing 7.75% nickel at a Cr-content of 15% pertain to the group of steels whose austenite is stable down to -78°C . If the Cr-content is reduced to 12.5%, the nickel content of the alloy should be increased to 9.5% to obtain a stable austenitic state. Increasing the heating temperature from 850 to $1,050^{\circ}\text{C}$ considerably affects the kinetics of all subsequent transformations.

Card 1/3

S/123/62/000/008/016/016
A004/A101.

The specific features of phase ...

If the temperature is increased, a diffusion of the secondary phases is taking place, which results in the solid solution being enriched with alloying elements, increasing its stability. Therefore, steels of this category may not have a martensite transformation after high-temperature heating. A protracted holding of the steels at such high temperatures as 850 - 950°C leads to precipitation processes of excess alloying elements and compounds from austenite and to a decomposition of δ -ferrite into a mixture consisting of γ' and carbides. In both cases, the formation of less alloyed austenite promotes a more complete martensite transformation during the subsequent cooling. The preceding heat treatment, during which $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ transformations were taking place, lowers the stability of austenite formed at high-temperature heating and contributes to its more complete transformation during the subsequent cooling. Hardening is effected up to 500°C in the case of a partial or full martensite transformation preliminarily taking place in the steel. The more complete the martensite transformation, the more considerable is the effect of precipitation hardening. A hardening of the steels may take place as a result of the secondary phase precipitating from the austenite subjected to phase workhardening in the process of martensite transformation. The energy additionally imparted to the steel on account of deformation during phase workhardening lowered the stability

Card 2/3

The specific features of phase ...

S/123/62/000/008/016/016
A004/A101

of austenite during heating and moreover, caused a precipitation of the secondary phases at a lower temperature. High-temperature hardening (700 - 750°C) is accompanied by diffusion processes of precipitation in the solid solution and can be observed in those cases in which the steel is not undergoing a preliminary martensite transformation during the heat treatment. Hardening is taking place during the precipitation of secondary phases from the solid γ -solution which is analogous to the hardening of austenitic and heat-resistant steels.

[Abstracter's note: Complete translation]

Card 3/3

X

VINOGRADSKAYA, Ye.A. [Vynohrads'ka, E.A.]

Materials on the mycoflora of fruit and berry crops of Kiev
Province. Visnyk Kyiv.un. no.1. Ser.biol. no.2:19-25 '58.
(MIRA 16:4)

(KIEV PROVINCE—FUNGI, PHYTOPATHOGENIC)
(KIEV PROVINCE—FRUIT—DISEASES AND PESTS)

SHEMYAKIN, M. M.; VINOGRADOVA, Ye. I.; FEYGINA, M. Yu.; ALDANOVA, N. A.

Depsipeptides. Part 17: Cyclization of linear tetra- and
~~octadepsipeptides~~. Zhur. ob. khim. 34 no.6:1798-1803
(MIRA 17:7)
1964.
1. Institut khimii prirodnikh soedineniy AN SSSR.

VINOGRADSKAYA, YE. L.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 340 - I

BOOK

Call No.: TN672.78

Author: KONTOROVICH, I. YE, and VINOGRADSKAYA, YE. L.

Full Title: TRANSFORMATION OF AUSTENITE TO LOW CARBON STEEL WITH VARIABLE CONTENTS OF CHROMIUM AND MANGANESE

Transliterated Title: Provrashcheniye austenita v malouglerodistoy stali s peremennym sodержaniyem khroma i margantsa

Publishing Data

Originating Agency: All-Union Scientific Engineering and Technical Society of Machine Builders. Urals Branch

Publishing House: State Scientific and Technical Publishing House of Machine Building Literature ("Mashgiz")

Date: 1950

No.: pp.: 7

No. of copies: 3,000

Text Data

This is an article from the book: VSESOUZHOYE NAUCHNOYE INZHENERNOTEKHNICHESKOYE OBSHCHESTVO MASHINOSTROITELEY. URAL'SKOYE OTDELENIYE, THERMAL TREATMENT OF METALS - Symposium of Conference (Termicheskaya obrabotka metallov, materialy konferentsii) (p. 73-80), see AID 223-II

Coverage: The experimental data on the effects of different concentrations of chromium and manganese on the alloyed steels stability and on transformation of austenite are discussed on the basis of the micrographic and magnetometric analysis.

1/2

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2"

VINOGRADSKAYA, Ye.L.

PA - 2529

AUTHOR:
TITLE:

WINOGRADSKAJA, E.L., KRESLINA, G.A., ca, d tech.sc.
The Influence Exercised by Chemical Composition on some Rules
on the Occasion of Martensite Transformation. (Wlijanija
chimscheskogo sostawa na nekotoryie zakonomernosti martensit-
nyoh prewraschtschenij, Russian).
Latvijas PSR Zinatnu Akad. Vestis, 1957, Vol 1, Nr 2, pp 153 -
160, (U.S.S.R.)
Received: 5 / 1957

PERIODICAL:

Reviewed: 6/1957

ABSTRACT:

The investigations of transformations in the cast of colored
metals led to completely changes conceptions concerning the nature
of transformation from the -phase to the -phase. Anomalies
can, compared to typical phase transformations, be explained by
the fact that they occur as a result of low energy conditions
of atomic thermal oscillations. The character of the transforma-
tion (cast) is shown by table 2. In order to determine the
character of the "inverse" () transition (corresponding to the
"inverse" transformation) the samples were slowly heated
(50° min) in a liquid surrounding up to T-900°, and were subject-
ed to low-temperature cooling down to T = -194°. Chemical compo-
sition exercises hardly any influence at all on the temperature
of the domain of "inverse" transformation (). In order to
determine structural stress (of the transitions) the casting

AS.
PRI
SUB.
AVA1
Card

Card 1/2

611

AUTHORS: Vinogradskaya, Ye. L., Candidate of Technical Sciences
and Kreslina, G.A., Ing. (Mechanical Engineering
Laboratory, Ac.Sc., Latvia).

TITLE: On certain relations governing direct and reversible
martensitic transformations. (O nekotorykh
zakonomernostyakh pryamogo i obratnogo martensitnogo
prevrashcheniya).

PERIODICAL: "Metallovedenie i Obratbotka Metallov" (Metallurgy and
Metal Treatment), 1957, No.5, pp.12-15 (U.S.S.R.)

ABSTRACT: 4 mm dia., 70 mm long specimens made of an iron base
alloy containing 0.06% C, 13.2% Mn, 0.2% Cu and 2.12% Co
were investigated by means of a magnetometric method
described in earlier work (1) and (2) and the results
are evaluated from the point of view of the change of
the quantity of the α -phase in the specimen. The
temperature range of martensite transformation was
determined by heating the specimen to 900°C, super-
cooling it in a liquid bath to 300°C and cooling at
3°C/min in a thermostat to -194°C followed by slow heat-
ing at room temperature. Furthermore, the temperature
range of α to γ transformation, the influence of the
stresses on the kinetics of γ to α and α to γ transfor-
mations were investigated and also the re-establishment
of the original structural state. A full hysteresis
loop of the γ to α and the α to γ transformation cycle

Card 1/2

On certain relations governing direct and reversible martensitic transformations. (Cont.)

was obtained; for the investigated alloy the hysteresis of the initial transformation amounts to about 240°C . The stabilisation of the γ -stage depends on a number of factors, the most important being the temperature to which the specimen is heated after the first γ to α -transformation. The maximum degree of stabilisation during the second γ to α transformation is achieved in the case of heating to a temperature corresponding to the end of the α to γ transformation. Stabilisation is obviously caused by stresses in the γ -phase which occur during the γ to α and during the α to γ transformations; these stresses "distort" the γ -phase and these distortions are not removed, not even when the α -phase ceases to exist during α to γ transformation. These distorting stresses can be removed only by super-heating the γ -phase to 170 to 200°C above the full transformation temperature, after which the ability of the γ -phase to full martensitic transformation during subsequent cooling is re-established. Increased stabilisation of the γ -phase during complete and incomplete γ to α and α to γ transformation cycles is of practical interest. Re-hardening of hardened components is frequently unjustified since heating above the critical point removes the influence of the previous history of the material on its subsequent properties. 3 graphs and 2 Russian references.

Card 2/2

ACCESSION NR: AT4040796

S/2685/63/000/002/0023/0030

AUTHOR: Vinogradskaya, Ye. L. ; Molchanova, G. A.

TITLE: Changes in phase structure and hardening pattern of high alloy steels in the process of cold forming

SOURCE: AN LatSSR. Institut avtomatiki i mekhaniki. *Prevrashcheniya v splavakh i vzaimodeystviye faz*, no. 2, 1963, 23-30

TOPIC TAGS: steel, plastic deformation, high alloy steel, steel structural changes, steel phase conversion, steel hardening pattern, heat treatment, precipitation hardening, phase conversion, deformation level, work hardening, annealing

ABSTRACT: Four compositions (see Table 1 in the Enclosure) were tested for the effects of heat treating procedure (air cooling after 20 min. at 850, 950, 1050 or 1200C, preceded by annealing for 3 hrs. at 750C) and deformation levels (cold forming to 3-18% deformation) on changes in phase structure and hardness. In addition, samples of alloy No. 1 were hardened by air cooling from 850, 1050 or 1200C, then step-tempered from 350 to 1000C at 50° intervals of 1 hour duration, to determine effects of deformation levels (4.7-17.9%) on processes of precipitation hardening. It is concluded that the pattern of changes in phase structure and properties of an alloy are governed by its phase stability. Alloys containing high proportions

Card 1/8

ACCESSION NR: AT4040796

of austenite obtained by high temperature hardening are not subject to phase conversions as a result of plastic deformation. Strength increases (from 200 to 300 kg/mm²) as a result of excess phase separation from solid solution and work hardening. Supplemental annealing increases hardening still further, especially above 650C, due to precipitation hardening caused by submicroscopic separations of secondary phases. Plastic deformation of alloys with less stable austenite, obtained by hardening from lower temperatures, leads to hardening due to partial γ to α conversions and work hardening processes. Annealing at 500C enhances hardness further, to levels of 500 kg/mm². "The authors thank Ya. M. Potak (Candidate in the Technical Sciences) and V. I. Chugunov (Engineer) for preparing the alloys." Orig. art. has: 1 table and 3 graphs.

ASSOCIATION: Institut avtomatiki i mekhaniki AN LatSSR (Institute of Automation and Mechanics, AN LatSSR)

SUBMITTED: 00

DATE SEL: 15Jul64

ENCL: 01

SUB CODE: MM

NO REF SOV: 010

OTHERL 005

Card 2/3 2

ACCESSION NR: AT4040797

S/2685/63/000/002/0031/0040

AUTHOR: Kontorovich, I. Ye.; Vinogradskaya, Ye. L.

TITLE: Oxidation resistance of low and high alloy steels at high temperatures

SOURCE: AN LatSSR. Institut avtomatiki i mekhaniki. Prevrashcheniya v splavakh i vzaimodoystviye faz, no. 2, 1963, 31-40

TOPIC TAGS: steel, steel oxidation, low alloy steel, high alloy steel, oxidation resistant steel, steel A, steel U8, steel 38KhA, steel 40KhNMA, steel EZh-2, steel B, steel V, steel G, steel D, steel calorizing, steel composition, high temperature steel, calorization film composition, high temperature diffusion

ABSTRACT: Samples of nine steels (see Table 1 in the Enclosure) were tested for up to 210 hrs. at 900C or up to 50 hrs. at 1000C, either prior to or after calorizing (49% Al, 49% Al₂O₃; 2% NH₄Cl, 5 hrs. 900C), to determine the effects of chemical composition on resistance to oxidation at high temperatures. It was found that calorizing improves oxidation resistance of high alloy steels. For steels with the highest resistance, improvement was noted during the initial oxidation period, while the effect was evident over extended periods for steels with substandard initial resistance. Chemical composition of the core continued to affect oxidation

Card 1/3

ACCESSION NR: AT4040797

resistance even after calorizing, due both to diffusion processes occurring during prolonged exposures to high temperatures and, equally so, to the varying composition of surface films forming during the calorization of various steels. Orig. art. has: 1 table and 4 graphs.

ASSOCIATION: Institut avtomatiki i mekhaniki AN LatSSR (Institute of Automation and Mechanics, AN LatSSR)

SUBMITTED: 00

DATE SEL: 15Jul64

ENCL: 01

SUB CODE: MM

NO REF SOV: 002

OTHER: 005

Cord 2/3

ACCESSION NR: AT4040797

ENCLOSURE: 01

designa- tion	Chemical composition in %							
	C	Mn	Si	Cr	Ni	W	Mo	N
A	0,03	—	—	—	—	—	—	—
U8	0,78	0,35	0,37	—	—	—	—	—
38KhA	0,37	0,65	0,40	1,09	—	—	—	—
40KhNMA	0,41	0,65	0,37	0,77	1,72	—	0,25	—
EZh-2	0,18	0,47	0,32	13,1	—	—	—	—
B	0,11	1,3	0,71	16,3	25,4	—	6,25	0,15
V	0,41	6,5	0,53	13,4	6,2	1,5	—	—
V	0,45	0,60	0,34	14,2	15,4	2,5	0,25	—
G	0,3	0,81	0,56	22,5	10,7	2,33	—	—
D	—	—	—	—	—	—	—	—

Table 1.

Card 3/3

ACCESSION NR: AT4040795

S/2685/63/000/002/0003/0021

AUTHOR: Vinogradskaya, Ye. L. (Candidate of technical sciences); Prosvirin, V. I. (Doctor of technical sciences); Molchanova, G. A.

TITLE: Properties and structure of austenitic steel

SOURCE: AN LatSSR. Institut avtomatiki i mekhaniki. Prevrashcheniya v splavakh i vzaimodeystviye faz, no. 2, 1963, 3-21

TOPIC TAGS: steel, steel structure, steel mechanical property, austenitic steel, transition steel, plastic deformation, heat treatment, alloy steel, ferrite

ABSTRACT: At the present time, considerable attention is being paid to the austenitic-ferritic alloys — the so-called transition grade steels. The strength of these steels is determined by martensitic transformation, and can be increased by aging as well as by strain hardening. The present authors investigated a steel of the transition class (0.07% C; 15.0% Cr; 5.9% Ni; 2.5% Mo; 1.2% Al) in order to study its structure and properties in relation to heat treatment and various degrees of plastic deformation. Specimens 5 mm in diameter and 20 mm long after 20 min. annealing at temperatures of 1200, 1050, 950 and 850C, with subsequent air cooling, were examined microscopically, and the effect of plastic deformation was investigated on specimens of varying original size, selected so as to obtain a

Card 1/3

ACCESSION NR: AT4040795

5 x 20 mm specimen after deformation. The results of phase transformation and microhardness tests are graphed. It is concluded that two basic phases are preserved in the structure of austenitic-ferritic steel after all possible variations in treatment - austenite and delta-ferrite as separate grains of various sizes and form. In the process of high-temperature annealing, diffusional interchange may occur between the grains of austenite and delta-ferrite, producing variations in the concentration of alloying elements in these phases. As the result of such an exchange, the properties and structure of the grains are changed, and correspondingly also the final properties of the alloy. As shown by microhardness distribution, grains of austenite and delta-ferrite are heterogeneous with regard to their composition, even within the limits of a micrograin. Cold plastic deformation strengthens austenite grains to a higher degree than delta-ferrite grains. Because of the considerable heterogeneity in composition of the grains, their strengthening due to phase transformation, precipitation, or plastic deformation is non-uniform. Drawing of an alloy at 600 C reduces the strength of the grains in phases obtained by quenching from high temperatures (1050; 1200 C) and strengthens the grains in phases obtained by quenching from low temperatures (850 C). Orig. art. has: 5 graphs and 25 photomicrographs.

Card

2/3

ACCESSION NR: AT4040795

ASSOCIATION: Institut avtomatiki i mekhaniki AN LatSSR (Institute of Automation and Mechanics, AN Lat SSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO-REF SOV: 011

OTHER: 005

Card

3/3

ACC NR: AP7004066

SOURCE CODE: UR/0190/67/009/001/0254/0255

AUTHOR: Vinogradskaya, Ye. L.

ORG: none

TITLE: Conference on the mechanics of polymers

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 9, no. 1, 1967, 254-255

TOPIC TAGS: chemical conference, polymer chemistry, morphology, ~~polymer~~, polymer structure, mechanical property

ABSTRACT: The First All-Union Scientific Conference on the Mechanics of Polymers was held in Riga on November 10-12, 1965. The Conference was attended by over 800 representatives of scientific research and industrial organizations, and institutions of higher education. The Conference was concerned with the development of the three basic trends of the mechanics of polymers: theory of strength, theory of deformation, and long-time stability of plates and shells. The following list gives the authors and subjects of selected papers from the proceedings of the conference: S. N. Zhurkov, fluctuation theory of strength; G. M. Bartenev, athermic and thermal failure mechanism and time dependence of the strength of brittle polymers; S. V. Serensen, static aspect of the mechanical strength of glass-reinforced plastics; T. I. Sogolova, controlling the mechanical

Card 1/2

UDC: 063+541.12+541.6

ACC NR: AP7004066

properties of polymers by changing their morphological forms; Ye. L. Vinogradskaya, relationship between the morphological forms and the physicomachanical properties of certain polymers; L. A. Faytel'son and I. P. Briyedis, dynamic characteristics of polymer systems with a high degree of filling; Yu. S. Urzhumtsev and S. L. Skalozub, acoustic fatigue of certain polymers; V. A. Latishenko, nondestructive tests for the mechanical properties of polymeric materials. The proceedings of the Conference were said to have greatly enhanced the collaboration of mechanical engineers and chemists in the field of the mechanics of polymers. The importance of such collaboration was stressed in the introductory paper by A. K. Malmeyster, president of the Organizing Committee.

SUB CODE: 11, 07/ SUBM DATE: none/ ATD PRESS: 5113

Card 2/2

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2"

$$\frac{1}{2} = \frac{1}{2} \cdot \frac{1}{1} = \frac{1}{2} \cdot \frac{1}{1}$$

P_{-}

Page 213

26

molecular structure and properties of these polymers.
... will contribute to the proper design and effective

L 47748-65

NO REF SOV: 0007

P
Card 2/2

PROSVIRIN, V.I., doktor tekhn.nauk, red.; VINOGRADSKAYA, Ye.L.,
kand. tekhn. nauk, red.; TARASOV, B.Ya., red.;
TEYTEL'BAUM, A., red.

[Transformations in alloys and the interaction of phases]
Prevrashcheniia v splavakh i vzaimodeistvie faz. Riga, Izd-
vo AN Latv.SSR. Vol.2. 1963. 94 p. (MIRA 17:4)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademijs.
Automatikas un mekhanikas instituts.

S/685/61/000/000/001/004
D205/D301

AUTHORS: Vinogradskaya, Ye.L., Molchanova, G.A., and
Prosvirin, V.I.

TITLE: Peculiarities of phase transformations in steels of
the transition class

SOURCE: Akademiya nauk Latvyskoy SSSR. Institut avtomatiki i
mekhaniki. Prevrashcheniya v splavakh i vzaimodeyst-
viye faz. Riga, 1961, 3 - 49

TEXT: The present work is concerned with the phase transformations occurring in high resistance, low carbon steels lying between the martensitic and austenitic types. A critical survey of the published work on the subject precedes the presentation of the performed investigation. Two groups of alloys have been studied. The first group includes alloys having constant Cr and Mo contents, (15.0 and 2.5 % respectively) and variable Ni and Al contents (in ranges 5.9 - 7.75 and 1.2 - 0.7 % respectively). The second group includes alloys having a lower Cr content - 12.5 %, Ni from 7.88 to 9.57 %, Al from 1.4 to 0.9 % and Mo - 2.5 % as in the first group. The carbon
Card 1/4

S/685/61/000/000/001/004
D205/D301

Peculiarities of phase ...

content of all alloys was 0.07 %. In the range 5.9 - 9.57 % Ni steels ranging from austenitic-martensitic have been prepared. δ -ferrite was revealed in both groups, its amount in the first group being somewhat higher. In every group, however, the amount of δ -ferrite varied from alloy to alloy. After smelting, the specimens were forged to rods of 7 - 8 mm radius, quenched from 1050°C and annealed for 3 hours at 750°C. The obtained state was considered as the starting structure. The kinetic and the quantitative relations of the phase changes were investigated by the magnetic method. The microstructure and hardness of the alloys were also measured. Hysteresis loops of the $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ transformations in the +700 to -78°C temperature range are given. From these loops the temperatures of the martensitic transformations were determined. It was found that alloys containing 15 % Cr and 7.75 % Ni preserve their austenitic structure down to -78°C. If the Cr content is lowered to 12.5 %, the Ni content is to be increased to 9.5 % in order to ensure the stable austenitic state. The thermal history preceding the cooling-heating cycle of the hysteresis loop has a large influence on the loop itself. The increase of the pre-heating tem-

Card 2/4

S/685/61/000/000/001/004
D205/D301

Peculiarities of phase ...

perature from 850 to 1050°C causes the dissolution of the secondary phases and thus the solid-solution is enriched by alloying elements and its stability increases, the martensitic transformations being prevented. Prolonged pre-heatings at high temperatures cause separation of the excess of the alloying elements from the austenite and the decomposition of the δ -ferrites into γ' and carbides, enhancing the martensitic transformations during the hysteresis cycle. A complex secondary thermal treatment in which the $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ transformations take place enhances the martensitic transformations during the hysteresis cycle. The quantitative data on the influence of pre-heating temperature and the final cooling temperature on the phase composition and hardness of the alloys (Vickers degrees) are given for alloys of the I and II groups. The influence of annealing for 1 hour in the 300 - 700°C range was investigated. The annealing strengthens the alloys, but the exact character of this depends again on the previous history of the alloy. If the alloy did previously undergo a martensitic transformation, the highest strengthening occurs below 500°C, otherwise the strengthening occurs at 650 - 750°C and is quantitatively lower than in the first case. The influence of ageing performed at temperatures from 400 to

Card 3/4

S/685/61/000/000/001/004
D205/D301

Peculiarities of phase ...

750°C for up to 36 hours was also studied. Again, the hardening during ageing depends upon the annealing. There are 21 figures, 6 tables and 22 references: 11 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: Gibraith, Austral. Machinery, 11, 1958, 117, 23-31; Iron Age, 181, 1958, 22, 88-89; White, Metal Progr., 73, 1958, 6, 74-78; West, Metals, 15, 1957, 10, 62. ✓

Card 4/4

PROSVIRIN, V.I.; VINOGRADSKAYA, Ye.L.; MOLCHANOVA, G.A.

Phase transformations in transition-type steels. Fiz. met. i
metalloved. 11 no. 5:775-781 My '61. (MIRA 14:5)

1. Institut avtomatiki i mekhaniki AN Latviyskoy SSR.
(Steel--Metallography) (Phase rule and equilibrium)

PROSVIRIN, V. (Riga); VINOGRADSKAYA, Ye. (Riga); MOLCHANOVA, G. (Riga)

Phase changes of transient class steels by deep cooling. Vestis
Latv ak no.10:65-70 '60. (EEAI 10:9:10)

1. Akademiya nauk Latvyskoy SSR, Institut mashinovedeniya.

(Steel)

PROSVIRIN, V. (Riga); VINOGRADSKAYA, Ye. (Riga); MOLCHANOVA, G. (Riga)

Dispersion hardening of some high alloy steels. Vestis Latv ak no.12:
39-42 '60. (EEAI 10:9)

1. Akademiya nauk Latviskoy SSR, Institut energetiki i elektrotehniki.

(Steel)

VINOGRADSKAYA, Ye.L., kand.tekhn.nauk; MOLCHANOVA, G.A., inzh.

Effect of martensite transformation of fine crystal structure.
Metalloved. i term. obr. met. no. 1:20-25 Ja '61. (MIRA 14:1)

1. Institut mashinovedeniya AN Latvyskoy SSR.
(Iron—Metallography)
(Phase rule and equilibrium)

S/126/61/011/005/012/015
E073/E335

AUTHORS: Prosvirin, V.I., Vinogradskaya, Ye.L. and
Molchanova, G.A.

TITLE: On Phase Transformations in Steels of the
Intermediate Class

PERIODICAL: Fizika metallov i metallovedeniye, 1961,
Vol. 11, No. 5, pp. 775 - 781

TEXT: Steels of the intermediate class, i.e. intermediate
from martensitic to austenitic, are characterized by a
combination of properties and phase-transformations which
are characteristics for both martensitic and austenitic steels.
The results are described of investigations of phase-
transformations in three steels of this class. Of these,
Steel 1 is nearer to the martensitic class, Steel 3 is nearer ✓
to the austenitic and Steel 2 occupies an intermediate
position between the two. The contents of C, Cr and Mo were
maintained constant and the quantities of Ni and Al were
slightly varied (C 0.07%, Mn 0.07%, Si 0.4%, Cr 12.5%,
Card 1/7

S/126/61/011/005/012/015
E073/E335

On Phase Transformations

Ni 7.8-8.8%, Al 1.4-1.1%). The ratios of the yield point to the UTS for the Steels 1, 2 and 3 after normalisation treatment at 1 050 °C are, respectively, 0.76, 0.23, 0.21. After a second normalisation treatment at 950 °C and additional cooling to -70 °C, followed by subsequent ageing at 500 °C for one hour, these ratios reached values of 0.9. For a maximum value of $\sigma_{0.2T} = 150 \text{ kg/mm}^2$ for Steel 1, $\delta = 14\%$

and $\psi = 54\%$ were achieved. A feature of these steels is that they occupy a very narrow range as regards composition, which involves practical difficulties during manufacture. An increase in the hardening temperature from 850 - 1 050 °C (air quenching) brings about a large increase in the quantity of the residual austenite, particularly in Steel 3 which is nearer to the austenitic-class steel. Fig. 1a shows the influence of the hardening temperature, °C, on the quantity of the residual austenite, A, %, and on the hardness HV. Fig. 1b shows the decrease in the quantity of the austenite ($\Delta A, \%$) and the increase in the hardness ΔHV as functions

Card 2/7

On Phase Transformations

S/126/61/011/005/012/015
E073/E335

of the hardening temperature, °C, after cooling the specimens to -194 °C. The influence of stepwise heat was also investigated. All the steels were subjected to stepwise heating for one hour at 350, 500, 650 and 800 °C for one hour, with intermediate cooling at room temperature. After initial cooling to 15 °C and after cooling to -194 °C. Regardless of the original hardening temperature the steels hardened considerably (by 40-50%) as a result of subsequent heating to 500 °C. However, the quantity of austenite remained practically unchanged and this indicated that precipitation-hardening occurred; reheating even to 650 °C resulted in a decrease in hardness which was still higher than the original value; the austenite quantity increased by about 12% for all the tested original hardening temperatures. A further heating of the specimens to 800 °C brought about a further decrease in hardness and a decrease in the quantity of austenite. The increase in the quantity of austenite on heating to 650 °C is due to reversible martensitic transformations during heating. To reveal more clearly the nature of the hardening

Card 3/7

On Phase Transformations

S/126/61/011/005/012/015
E073/E335

of the hardened steels during stepwise heating, the temperature steps were made more close. Each specimen was first heated to 350 °C for one hour, cooled to 20 °C, again heated to 400 °C, cooled to 20 °C, reheated to 450 °C, etc., the maximum temperature being 1 050 °C. The preliminary heat-treatment was hardening from 950 and 1 050 °C and part of the specimens were first subjected to cooling to -78 °C. The obtained results show that the increase in hardness of the alloy on heating it to 500-550 °C will be the more intensive the more complete the martensitic transformation. The close temperature steps used in experiments have revealed a very interesting feature, namely, that regardless of the original heat-treatment the steel tends to reach a certain limit hardness of about 300 Vickers units, which is conserved up to temperatures of 900-950 °C. The nature of precipitation-hardening during ageing was investigated for hardened steel, heated to 400, 450, 500, 700 and 800 °C for durations of 1 to 36 hours; part of the specimens were deep-cooled to Card 4/7

On Phase Transformations

S/126/61/011/005/012/015
E073/E335

-194 °C for 20 min prior to heating. The results confirmed that precipitation-hardening in the temperature range 400 - 500 °C was associated with rejections from phase-hardened austenite. If the martensite point was not reached during hardening but the final cooling temperature was near to the martensite point, a slow precipitation-hardening was also observed. This may be due to diffusional development of martensitic nuclei which do not develop into martensitic transformation. Phase-hardening by precipitation-hardening produces hardening of the austenite which is unstable and decreases on prolonged heating to 500 °C. Higher heating temperatures produced active processes of rejection, dissolution and coagulation. Results obtained for steels aged at 700 and 800 °C indicated that regardless of the original state, steel heated to temperatures up to 700 °C tended to reach a hardness of 300 kg/mm² after 36-40 hours. At 800 °C the process of coagulation of secondary phases was more intensive and had a considerable influence on the process of

Card 5/7

On Phase Transformations

S/126/61/011/005/012/015
E073/E335

softening; at 800 °C both hardening and softening proceed simultaneously. There are 7 figures, 1 table and 10 references: 6 Soviet and 4 non-Soviet. The four English-language references quoted are: Ref. 3 - A. Gibraith, Austral Machinery, 1958, 11, No. 117, 23; Ref. 4 - (Review) Iron Age, 1958, 181, No. 22, 88; Ref. 5 - (Review) West Metals, 1957, 15, No. 10, 62; Ref. 6 - R. White, Metal Progress, 1958, 112, 51. ✓

ASSOCIATION: Institut avtomatiki i mekhaniki AN Latviyskoy SSR (Institute of Automation and Mechanics of the AS Latvian SSR)

SUBMITTED: August 29, 1960

Card 6/7

88367

S/129/61/000/001/004/013

E111/E152

24 7100

AUTHORS: Vinogradskaya, Ye.L., Candidate of Technical Sciences,
and Molchanova, G.A., Engineer

TITLE: Influence of Martensite Transformations on Fine
Crystal Structure

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1961, No. 1, pp. 20-25

TEXT: The relation between changes in individual parameters
of fine crystal structure of phases and transformation effects has
been reported (Refs 1-7). The authors describe their work on the
fine crystal structure of gamma and alpha phases in the course of
forward and reverse martensite transformations in an iron alloy
with 0.16% C, 13.8% Mn and 1.8% Cu. The fine structure was
measured from the width of X-ray interference lines of the K_{α} -
series (200) and (211) for the alpha and (220) and (311) for the
gamma phases, with iron-radiation on a type YPC-70 (URS-70)
installation. A definite region of the same specimen, heat treated
to give first the forward and then the reverse transformation, was
photographed. The degree of transformation was found with the aid
Card 1/3

X

88367

S/129/61/000/001/004/013
E111/E152

X

Influence of Martensite Transformations on Fine Crystal Structure of a magnetometer, as described by Ye.L. Vinogradskaya (Ref.8). The heat treatments and corresponding changes are shown in Fig.1 and Table 1 for an undeformed specimen. To observe the effect of external load on the fine crystal structure changes of alpha and gamma phases, the standard specimen was cooled to a low temperature and deformed by extension at room temperature to 2.1%. The treatments and corresponding changes are shown in Fig.2 and Table 2. This table also gives results (shown in Fig.3) when other deformation and heat treatments were included. The authors conclude that the state of both alpha and gamma phases changes in the forward and reverse martensite transformations; the observed stabilization of the gamma phase with prolonged holding at the critical temperature shows that there are factors additional to hardening which promote stabilization. Slight plastic deformation of the hardened specimen promotes relaxation of heterogeneous local stresses, which in the gamma-phase lattice favours additional transformation to alpha and, perhaps, growth of coherent scattering regions in the alpha → gamma transformation.

Card 2/3

88367

S/129/61/000/001/004/013
E111/E152

Influence of Martensite Transformations on Fine Crystal Structure

Plastic deformation at 20 °C of both hardened and untreated specimens has no effect on the critical temperatures of the reverse martensitic transformations, and the effect of plastic deformation is completely eliminated by suitable treatment. There are 3 figures, 2 tables and 10 Soviet references.

ASSOCIATION: Institut mashinovedeniya AN Latviyskoy SSR
(Institute of Science of Machines,
AS Latvian SSR)

✓

Card 3/3

S/137/62/000/007/041/072
A057/A101

AUTHORS: Vinogradskaya, Ye. L., Molchanova, G. A., Prosvirin, V. I.

TITLE: Peculiarities of phase transitions in steels of the transient class

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 23 - 24, abstract 71142 (In collection: "Prevrashcheniya v splavakh i vzaimodeystviye faz". Riga, AN LatvSSR, 1961, 3 - 49)

TEXT: Kinetics of phase transitions $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ in the temperature interval from 700 to -78°C was investigated, as well as processes of separation and dissolving of secondary phases in the interval $350 - 1,050^\circ\text{C}$ with two groups of steels containing the following alloying elements (in %): C 0.07, Cr 15, Ni 5.90 - 7.75, Mo 2.5, Al 0.70 - 1.20 (I) and C 0.07, Cr 12.50, Ni 7.88 - 9.57, Mo 2.5, Al 0.90 - 1.40 (II). The samples were heat-treated under different conditions. The investigation was carried out by microstructure, hardness, and magnetic methods. The obtained hysteresis loops of $\gamma \rightarrow \alpha$ and $\alpha \rightarrow \gamma$ transitions allowed the determination of the critical temperatures of martensitic transitions. It was determined that the austenite of steel I is stable down to -78°C , a stable aus-

Card 1/2

Peculiarities of...

S/137/62/000/007/041/072
A057/A101

tenitic state of steel II can be obtained only with 9.5% Ni. A rise of the heating temperature from 850 to 1,050°C shows a considerable effect upon the kinetics of subsequent transformations; after a high-temperature heating martensite transformations can be absent due to an increased alloying of austenite. Long holding times at 850 and 950°C effect a separation of the alloying elements from austenite and decomposition of δ -ferrite into a mixture γ' + carbides, resulting in an impoverishment of the austenite thus promoting a more complete occurrence of martensite transformation at the subsequent cooling. Strengthening is observed in tempering in the interval 300 - 700°C, which is more considerable and occurs at about 500°C in the presence of martensite transformation in the steel; and in the absence of martensite transformation it is less and occurs at higher tempering temperatures (650 - 750°C).

G. Belyayeva

[Abstracter's note: Complete translation]

Card 2/2

VINOGRADSKAYA - YEZERSKAYA, M.A.

YANOVSKIY, D.N., prof.; NADGORMAYA, N.I., nauchnyy sotrudnik; VINOGRADSKAYA-
YEZERSKAYA, M.A.; GARDZIY, G.P.

Electron microscopy in hematology. Vrach.delo no.11:1185-1187 II '57.
(MIRA 11:2)

1. Otdel klinicheskoy gematologii (zav. - prof. D.N.Yanovskiy)
Ukrainskogo instituta klinicheskoy meditsiny im. akad. N.D.Strazhesko
i laboratoriya etiologii opukholey (zav. - deystv. chlen AMN SSSR,
prof. A.D.Timofeyevskiy) Ukrainskogo instituta epidemiologii i
mikrobiologii Ministerstva zdravookhraneniya USSR.
(ELECTRON MICROSCOPY) (BLOOD)

VINOGRAD-SKAYA-YEZERSKAYA, M. A.

"In Connection With the Therapeutic Use of Radioactive Phosphorus in Polycythemia and Chronic Leukoses," by M. A. Vinogradskaya-Yezerskaya, Division of Clinical Hematology (head, Prof D. N. Yanovskiy), Ukrainian Institute of Clinical Medicine, Academician N. D. Strazhesko, Vrachebnoye Delo, No 10, Oct 56, pp 1011-1015

Tests were run on 15 chinchilla rabbits, 12 of whom received radioactive phosphorus in amounts of 1.5-2 millicuries per 60 kg of body weight.

Histopathologic studies showed significant hyperplasia of the bone marrow of all the rabbits that died or were sacrificed. There was dystrophy of all the organs and tissues and a congested appearance and edema of all the organs. Especially important changes appeared in the thickening of the walls of blood vessels.

Dynamic changes of the blood and punctate of bone marrow of the rabbits that were treated with radioactive phosphorus confirmed changes in hemopoietic organs. These changes depended on the quantity of radioactive phosphorus and were expressed by the stimulation of the reticular tissue of the bone marrow.

It was characteristic that after the administration of p32 was discontinued, hemopoiesis was restored spontaneously and the animals improved, but within 3, 8, or 14 months they died without any apparent cause.

These observations and results warn against extensive indiscriminate therapy by radioactive isotopes and especially p32.

Sum 1239

MYASNIKOV, Aleksandr Leonidovich; CHAZOV, Yevgeniy Ivanovich;
SHKHVATSABAYA, Igor' Konstantinovich; KIPSHIDZE, Nodar
Nikolayevich; VINOGRADSKIY, A.B., red.; MIRONOVA, A.M.,
tekhn. red.

[Experimental necroses of the myocardium] Eksperimental'-
nye nekrozy miokarda. Moskva, Medgiz, 1963. 202 p.
(HEART--NECROSIS) (MIRA 16:10)

ABRAMOV, M.G., doktor med. nauk; ALEKSEYEV, G.A., prof.; ASTAPENKO, M.G., prof.; BUREYKO, V.M., dots.; VARSHAMOV, L.A., prof.; VINOGRADSKIY, A.B., KARPOVA, G.D.; KASSIRSKIY, I.A., prof.; KUSHKIY, R.O., doktor med. nauk; LIBERMAN, B.I.; LIKHTSIYER, I.B., prof.; LUZHETSKAYA, T.A., kand. med. nauk; MOISEYEV, S.G., prof.; NASONOVA, V.A., dots.; NESGOVOROVA, L.I.; POROSHINA, I.I.; PREOBRAZHENSKIY, A.P., dots.; RADVIL', O.S., prof.; RATNER, M.Ya., doktor med. nauk; RASHEVSKAYA, A.M., prof.; SEMENDYAYEVA, M.N., kand. med. nauk; SIGIDIN, Ya.S., kand. med. nauk; ARTEM'YEV, S.G., red.

[Therapist's handbook] Spravochnik terapevta. Izd.2., ispr. i dop. Moskva, Meditsina, 1965. 863 p.

(MIRA 18:6)

1. Deystvitel'nyy chlen AMN SSSR (for Kassirskiy).

VINOGRADSKIY, A.B.

First plenum of the All-Russian Scientific Society of Therapists.
Biul. Uch. med. sov. 3 no.3:32-35 My-Je '62.

(MIRA 17:10)

VINOGRADSKIY, A.Yu., inzh.

Discussing some paragraphs of the Regulations for the Technical
Operation of Electric Power Plants Equipped with Internal
Combustion Engines as applied to the present-day practices of
diesel electric power plants. Energomashinostroenie 8 no.3:43, 48
Mr '62. (MIRA 15:2)

(Electric power plants)
(Electric engineering—Laws and legislation)

VINOGRADSKIY, B.

How to show more goods to a customer. Sov. torg. 35 no.5:
54-57 My '62.

(MIRA 15:5)

(Store fixtures)

VINGRADSKIY, B.

Let's make rational use of commercial space. Sov.torg 34 no.3:49-
52 Nr '61. (MI: 14:2)
(Moscow--Clothing industry) (Store fixtures)

YANOVSKIY, D.N., prof.; NADGORNAYA, N.I.; GANDZIY, G.P.; VINOGRADSKAYA-
YEZERSKAYA, M.A.

Morphology of thrombocytes in leukemia patients as shwn by data of
the electron microscope. Vrach.delo no.12:1275-1279 D '59.

(MIRA 13:5)

1. Laboratoriya etiologii opukholey (zav. - deystvitel'nyy chlen
AMN SSSR, prof. A.D. Timofeyevskiy) Ukrainskogo nauchno-issledo-
vatel'skogo instituta epidemiologii i mikrobiologii i otdel klini-
cheskoy gematologii (zav. - prof. D.N. Yanovskiy) Instituta klini-
cheskoy meditsiny im. akademika N.G. Strazhesko.

(BLOOD PLATELETS)

MYASNIKOV, A.L., prof., red.; VINOGRADSKIY, A.B., red.; BUL'DYAYEV,
N.A., tekhn. red.

[Use of steroid hormones in the clinic for internal diseases] Pri-
menenie steroidnykh gormonov v klinike vnutrennikh boleznei. Mo-
skva, Medgiz, 1962. 174 p. (MIRA 15:6)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Myasnikov).

(STEROID HORMONES)

(MEDICINE, INTERNAL)

VINOGRADSKIY, A.B.

Conference on the use of anticoagulants (Leningrad, March 9-11,
1961). Biul.Uch. med. sov. 2 no.3:29-32 My-Je '61. (MIRA 14:10)
(ANTICOAGULANTS (MEDICINE))

TARASOV, K.Ye., dotsent; VINOGRADSKIY, A.B.; SMOLENSKIY, V.S.

Deductive conclusions in diagnosis. Trudy 1-go MTI 37:174-184 '65.
(MIRA 18:8)

VINOGRADSKIY, A.B.

Effect of ACTH on experimental atherosclerosis. Biul. eksp. biol. i med.
46 no.11:28-32 N '58. (MIRA 12:1)

1. Iz gosptal'noy terapevticheskoy kliniki I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M. Sechenova (dir. - deystvitel'nyy chlen
AMN SSSR A.L. Myasnikov). Predstavlena deystvitel'snym chlenom AMN SSSR
A. L. Myasnikovym.

(ARTERIOSCLEROSIS, exper.

eff. of ACTH (Rus))

(ACTH, effects,

on exper. arteriosclerosis (Rus))

VINOGRADSKIY, A.B.

Effect of cortisone on the development of experimental atherosclerosis and on blood lipids and urinary 17-ketosteroids in humans; clinical and experimental studies. Terap.arkh. 31 no.9:47-56 S '59.
(MIRA 12:11)

1. Iz gosspital'noy terapevticheskoy kliniki imeni A.A. Ostroumova (dir. - deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) i Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(CORTISONE pharmacol.)

(ARTERIOSCLEROSIS exper.)

(LIPIDS blood)

(17-KETOSTEROIDS urine)

VINOGRADSKIY, A.B.

Blood lipids and 17-ketosteroids in the urine in adrenocorticotrophic hormone therapy. Probl. endok. i gorm. 6 no. 5:67-73 '60.

(MIRA 14:1)

(ACTH) (LECITHINS) (CHOLESTEROL) (STEROIDS)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001860010012-2"

VINOGRADSKIY, A. B. Cand Med Sci -- "Effect of ~~the~~ adrenocorticotrophic hypophysis hormone ~~hormone~~ (ACTH) and cortisone upon the development of experimental atherosclerosis, the level of blood lipids, and ^{secretion} ~~discharge~~ of 17-ketosteroids of ^{the} urine in humans." Mos, 1960 (Acad Med Sci USSR). (KL, 1-61, 206)

-388-

NEYMAN, I.I.; KIRILLINA, A.A.; VINOGRADSKIY, A.B.

Semiautomatic drill with four boring bars for making lock seats.
Suggested by I.I. Neiman, A.A. Kirillina, A.B. Vinogradskii. Pats.
1 izobr. predl. v stroi. no. 16:44-45 '60. (MIRA 13:9)

1. Rabotniki derevoobrabatyvayushchego kombinata No. 3 tresta
Glavmospromstroymaterialy Mosgorispolkoma, Moskva, 1-ya
Karacharovskaya ul, d. 8.
(Drilling and boring machinery)

VINOGRADSKIY, A.B.; USVATOVA, I. Ya.

Therapeutic use of hydrocortisone and the functional state of the adrenal cortex in myocardial infarct complicated by collapse. Kardiologiya 4 no.4:31-37 JI-Ag ' 64. (MIRA 1961)

1. Gosital'naya terapevticheskaya klinika (direktor- deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova. Submitted May 15, 1963.

VINOGRADSKIY, BORIS

ZAMKOVSKIY, Dmitriy Yekovlevich; VINOGRADSKIY, Boris Nikolayavich;
GRANOVSKAYA, I.K., redaktor; SUDAK, D.M., tekhnicheskiy redaktor

[Clothing; a handbook] Shveinye tovary; spravochnoe posobie. Moskva, Gos. izd-vo torgovoi lit-ry, 1956. 206 p. (MLRA 10:4)
(Clothing and dress--Marketing)

VINOGRADSKIY, B.

Racks for displaying ready-made clothes. Nov.torg.tekh.
no.3:21-22 '56. (MLRA 9:10)

(Clothing trade--Equipment and supplies)